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SPACE GATEWAY SUPPORT (SGS)              SGS-01 35 43.00 99 (December 2006)  
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Preparing Activity:   SGS-DE             Superseding  
                        SGS-01 35 43.00 99 (November 2006)
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## SGS GUIDE SPECIFICATIONS

References are NOT in Agreement with UMRL dated 09 October 2006

Revised throughout - changes not indicated by CHG tags

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## DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 35 43.00 99

## ENVIRONMENTAL PROCEDURES

12/06

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References not used in the text will automatically  
be deleted from this section of the project  
specification when you choose to reconcile  
references in the publish print process.

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The publications listed below form a part of this section and the work  
requirements:

FLORIDA ADMINISTRATIVE CODE (FAC)

FAC CHAPTER 62-257 (1999) Florida Administrative Code,  
Asbestos Program

FLORIDA STATUTES (FL-STAT)

FL-STAT 469 (2005) Asbestos Abatement

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

KNPR 1840.19 KSC Industrial Hygiene Program

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1926 (2006) Safety and Health Regulations for  
Construction

29 CFR 1926.1101 (2006) Asbestos

29 CFR 1926.1126 (2006) Heavy Metals

29 CFR 1926.55 (2006) Gases, Vapors, Fumes, Dusts, and  
Mists

29 CFR 1926.62 (2006) Lead

33 CFR 328 (2006) Definitions

40 CFR 152 - 186 (2006) Pesticide Programs

40 CFR 247 (2006) Comprehensive Procurement Guideline  
for Products Containing Recovered Material

40 CFR 260 (2006) Hazardous Waste Management System:  
General

40 CFR 261 (2006) Identification and Listing of  
Hazardous Waste

40 CFR 262 (2006) Standards Applicable to Generators  
of Hazardous Waste

40 CFR 263 (2006) Standards Applicable to  
Transporters of Hazardous Waste

40 CFR 264 (2006) Standards for Owners and Operators  
of Hazardous Waste Treatment, Storage, and  
Disposal Facilities

40 CFR 265	(2006) Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	(2006) Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
40 CFR 267	(2006) Interim Standards for Owners and Operators of New Hazardous Waste Land Disposal Facilities
40 CFR 268	(2006) Land Disposal Restrictions
40 CFR 273	(2006) Standards For Universal Waste Management
40 CFR 279	(2006) Standards for the Management of Used Oil
40 CFR 302	(2006) Designation, Reportable Quantities, and Notification
40 CFR 355	(2006) Emergency Planning and Notification
40 CFR 372-SUBPART D	(2002) Specific Toxic Chemical Listings
40 CFR 61	(2003) National Emission Standards for Hazardous Air Pollutants
40 CFR 68	(1999) Chemical Accident Prevention Provisions
40 CFR 761	(2006) Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
49 CFR 171 - 178	(2006) Hazardous Materials Regulations

#### UNITED STATES CODE (USC)

RCRA 6002	(1999) Guidance on Conducting Inspections of Federal Facilities
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### 1.3 DEFINITIONS

#### Environmental Manager:

Appoint in writing an Environmental POC for the project site, if qualified, this can be the Subcontractor's on-site supervisor. The Environmental Manager is directly responsible for coordinating compliance with Federal, State, local, and Spaceport requirements. The Environmental POC must, at a minimum, ensure compliance with Hazardous Waste Program requirements; [environmental permits](#); storage, handling, and reporting of hazardous materials per [49 CFR 171 - 178](#) and coordinate the remediation of regulated substances such as; lead, asbestos, PCB transformers, etc.. The person in this position must have adequate awareness training to accomplish the

following duties: ensure waste segregation and storage compatibility requirements are met; ensure all Subcontractor personnel are aware of Environmental POC and properly instructed , coordinate delivery and removal of waste containers and maintain the required records and documentation, including environmental permit compliance.

#### Environmental Pollution and Damage:

Environmental pollution and damage is the presence of undesirable chemical, physical, or biological elements or agents. These may adversely affect the environment; or human health or welfare; unfavorably alter ecological balances of importance to humankind; or degrade the environment.

#### Environmental Protection:

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment; particularly during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

#### Generated Hazardous Waste:

Generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Subcontractor to execute work, but are not fully consumed during the course of construction. Examples include but are not limited to, excess or waste thinners and solvents (i.e. methyl ethyl ketone, toluene, etc.), pesticides, and contaminated pesticide equipment rinse water, per 40 CFR 152 - 186.

#### Land Application for Discharge Water:

The term "Land Application" for discharge water implies that the Subcontractor must discharge water at a rate that allows the water to percolate into the soil. Sheeting action, soil erosion, discharge into storm sewers, discharge into drainage conveyance systems, septic drainfields, or discharge into the "waters of the United States" must not occur. Land Application must be in compliance with all applicable Federal, State, local, and Spaceport laws and regulations.

#### Surface Discharge:

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and require a permit to discharge water from the governing agency.

#### Waters of the United States:

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

#### Wetlands:

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland will be made by the Government.

#### 1.4 SUBMITTALS

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NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Keep submittals to the minimum required for adequate quality control. Include a columnar list of appropriate products and tests beneath each submittal description.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Subcontractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Submittal items not designated with a "G" are considered as being for information only for Army projects and for Subcontractor Quality Control approval for Navy, Air Force, and NASA projects.

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Submit the following in accordance with Section 01 33 00, "SUBMITTAL PROCEDURES," in sufficient detail to show full compliance with the specification:

##### SD-01 Preconstruction Submittals

Environmental Protection Plan  
Plan for Controlling Exposures to heavy metals  
Health and Safety Plan  
Plan for Controlling Exposures to Asbestos Containing Building  
Materials  
letter appointing the Environmental Manager  
[ Silica plan]  
[ request for a Gopher Tortoise survey]

Provide a list of all hazardous materials to be incorporated into the project including the [Material Safety Data Sheet](#).

#### SD-03 Product Data

##### [Recycled Materials](#)

Subcontractors must submit the SGS Subcontract Administrator with a report itemizing, per [40 CFR 302](#), all AP approved items used in the project.

Subcontractors must also provide to the SGS Subcontract Administrator a written justification for all items that are on the EPA CPG list but are not Affirmative Procurement approved. Subcontractor must obtain written approval from the SGS Subcontract Administrator prior use of items that are not approved. Use of non-Affirmative Procurement approved items without prior written approval must be replaced at the Subcontractor's expense.

#### SD-07 Certificates

Provide data indicating actual [monthly quantities of hazardous material](#) used, stored, and hazardous waste generated. Submit copies of signed internal manifests with [monthly inventory report](#) to the SGS Subcontract Administrator monthly.

#### SD-11 Closeout Submittals

Subcontractor must submit [Certification of Completion](#) and required documentation for completion of all [environmental permits](#) prior to the final inspection. Subcontractor must complete, sign and submit Part 2 of the AP Certification Form. Submit Certification of completion and required documentation for completion of all environmental permits including, but not limited to SWPPP Notice of Termination immediately following the final inspection.

If the Subcontractor HAZMAT requirements change during the Subcontract performance period, submit the HAZMAT requirement changes to the SGS Subcontract Administrator for approval.

As part of the project completion requirements, provide a close out report including the requirements presented in SD-07 to the SGS Subcontract Administrator.

### 1.5 ENVIRONMENTAL REQUIREMENTS

#### 1.5.1 General Conditions/Environmental Protection Plan

Provide and maintain, for the life of the subcontract, environmental protection to minimize environmental pollution and damage resulting from construction operations. Plan for and provide environmental protective measures to control pollution that occurs during normal construction practice to protect the environmental resources within the project boundaries and those affected outside the defined limits of work. This includes providing environmental protective measures , including an Operations Plan required to correct conditions that develop during the construction of permanent or temporary features associated with the project



during the entire duration of this subcontract. Comply with all applicable environmental Federal, State, local and Spaceport laws and regulations including water, air, solid waste, hazardous waste and substances, oily substances, and noise pollution. The Subcontractor is responsible for any delays resulting from failure to comply with environmental laws and regulations. Ensure compliance with this section by all Lower Tier Subcontractors. Documentation of these general conditions constitutes the environmental protection plan.

#### 1.5.2 Regulatory Inspections

The Subcontractor is advised that this project and the Spaceport are subject to Federal, State, and local regulatory agency inspections to review compliance with environmental laws and regulations. Fully cooperate with any representative from any Federal, State or local regulatory agency who visits the job site and provide immediate notification to the SGS Subcontract Administrator. Complete, maintain, and make available to the SGS Subcontract Administrator all documentation relating to environmental compliance under applicable Environmental Regulations. The Subcontractor must immediately notify the SGS Subcontract Administrator if a Notice of Violation (NOV) or similar regulatory notice is issued to the Subcontractor.

#### 1.5.3 Subcontractor Liabilities for Environmental Protection

The Subcontractor is responsible for all damages to persons or property resulting from Subcontractor fault or negligence as well as for the payment of any civil fines or penalties which are assessed by any Federal, State or local regulatory agency as a result of the Subcontractor's or any Lower Tier Subcontractor's violation of any applicable Environmental Regulations. If a Notice of Violation (NOV), Notice of Noncompliance (NON), Notice of Deficiency (NOD), or similar regulatory agency notice is issued to the Government as facility owner/operator on account of the actions or inactions of the Subcontractor or one of its subcontractors in the performance of work under this Subcontract, the Subcontractor must fully cooperate with the Government in defending against regulatory assessment of any civil fines or penalties arising out of such actions or inactions. The Subcontractor must immediately correct these actions or inactions.

#### 1.5.4 Subcontractors

The Subcontractor must ensure compliance with this section by Lower Tier Subcontractors.

#### 1.5.5 Requirements

Prepare and submit a site specific [Environmental Protection Plan](#) (EPP) with the project proposal. The EPP must identify a single point of contact for coordination of environmental requirements and issues during construction. The plan must include in as specific language as possible, how the Subcontractor complies with all environmental permit requirements including, but not limited to construction permits for domestic wastewater, potable water and stormwater (SJRWMD and NPDES). The plan must also address the following issues/activities: construction dewatering, protecting areas outside the defined limits of construction, hazardous materials storage per [49 CFR 171 - 178](#), non-hazardous solid waste collection/pickup, anticipated generation of controlled wastes including identification of chemicals stored and or used on-site, stock piling of soil/construction material laydown, site housekeeping and

avoidance/protection of wildlife. Reference to other documents containing direction for ACM abatement, worker protection/abatement for lead in construction materials and worker protection and notification for construction activity within Solid Waste Management Units (SWMU's) must be made as applicable.

#### 1.5.6 Appointment Of Environmental Manager

Prior to commencing construction activities or delivery of materials to the site, submit a [letter appointing the Environmental Manager](#) signed by an officer of the firm and stating that he/she is responsible for managing and implementing Environmental Protection as described in this Subcontract.

#### 1.5.7 Notification

The Government and their representatives may conduct periodic inspections of the project; the results of which will be made known to the SGS Subcontract Administrator. The SGS Subcontract Administrator will notify the Subcontractor in writing of any observed noncompliance with Federal, State or local environmental laws and regulations, permits, and other elements of the Subcontractor's Environmental Protection Plan. After receipt of such notice, inform the SGS Subcontract Administrator of the proposed corrective action with estimated time of implementation and completion; and take such action when approved by the SGS Subcontract Administrator. The SGS Subcontract Administrator may issue an order stopping all or part of the work until satisfactory corrective action has been taken.

#### 1.5.8 Training Of Subcontractor Personnel

Train personnel in applicable phases of environmental protection and pollution control. Conduct environmental protection/pollution control meetings for Subcontractor personnel prior to commencing construction activities. Conduct additional meetings for new personnel. The agenda must include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of pollution control devices, applicable best management practices, establishment and protection of vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other contaminants; recognition and protection of archaeological sites, artifacts, wetlands, protected areas, and endangered species and their habitat that are known to be in the area.

#### 1.5.9 Post Construction Cleanup

Unless otherwise instructed in writing by the SGS Subcontract Administrator, remove all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area must be graded, filled and the entire area seeded/mulched unless otherwise indicated. The Subcontractor must remove erosion and turbidity control measures only after authorization by the SGS Subcontract Administrator.

## 1.6 ENVIRONMENTAL PERMITS AND COMMITMENTS

### 1.6.1 Project Permits

Do not begin construction prior to receipt of all federal, state, and local construction permits as indicated in this section. The Subcontractor is required to post on site and adhere to all requirements and conditions of the permits. Include adherence to all conditions of the permit as well as requirements implied in the laws, ordinances, and regulations. The Subcontractor is responsible for payment of any fines from government agencies resulting from the Subcontractor's failure to adhere to all permit conditions and agency regulations. These include, but are not limited to, material and construction standards, environmental protection, certifications, notifications, and monitoring requirements

### 1.6.2 Relevant Environmental Permits

[Insert permit name and number if known.]

### 1.6.3 Certifications/Operating Permits

Provide to the Architect/Engineer "Record" drawings on all systems covered by a permit a minimum of thirty (30) days prior to project acceptance to allow for the Architect/Engineer to obtain the required final "Record" acceptance, certification, and/or operating permits. In most cases, said agency acceptance is required prior to occupancy of the facility or use of any part of the systems. The Subcontractor is advised that the use of unaccepted systems such as sanitary sewer systems, and those systems that affect the health and safety of the employees of the Subcontractor, the Owner, or the public at large, per 29 CFR 1926 is at the risk of the Subcontractor. The Subcontractor must use care in controlling and regulating the use of such systems.

The Subcontractor's project responsibility extends to the final acceptance or issuance of operating permits by the approval agencies or authorities and in some cases could extend the time frame beyond that for final project acceptance.

## 1.7 SPILLS

Make all reasonable and safe efforts to contain and control any spills that may occur. Any occurrence of a pollution incident or spill must be reported immediately (by phone) to the Emergency 911 (853-0911 from a non 867/861 exchange), then to the SGS Subcontract Administrator. The Subcontractor must assist the SGS Subcontract Administrator in completing the Pollution Incident Report whenever there is a spill or release. The Subcontractor must supply and use containment under all operations that could release materials into surface waters.

### 1.7.1 Spill Response Materials

Provide spill response materials to contain and control minor spills including, but not limited to: containers, shovels, and personal protective equipment. Spill response materials must be available at all times in which hazardous materials/wastes are being handled or transported. Spill response materials must be compatible with the type of material being handled.

### 1.7.2 Spill Cleanup

The Subcontractor is not responsible for the final cleanup and validation of a spill or release. This is the responsibility of the JBOSC Spill Cleanup Team.

## 1.8 MATERIAL MANAGEMENT

### 1.8.1 Chemical Reporting

Provide a complete and accurate list accompanied by the applicable Material Safety Data Sheets of all materials and chemicals to be stored onsite and/or used in the execution of this Subcontract which are subject to either the [Material Safety Data Sheet](#) reporting requirements of 29 CFR 1910.1200 or contain one or more of any toxic chemicals or extremely hazardous chemicals as listed in [40 CFR 355](#), appendices A and B and [40 CFR 372-SUBPART D](#) regardless of the quantity. This data is to be provided to the SGS Subcontract Administrator prior to the time of delivery of the materials to the site.

### 1.8.2 Monthly Inventory

Submit a [monthly inventory report](#) to the SGS Subcontract Administrator on or before the tenth (10) day of each month, with a final report to be submitted upon Subcontract completion. The inventory report must include the maximum quantity of each material that was present at the site at any one time, the [monthly quantities of hazardous material](#), the dates the material was present, the amount of each material that was used during the project, and the amount of material that was disposed. All inventory reporting is to be completed on as directed by the SGS Subcontract Administrator.

### 1.8.3 Exemptions

Chemicals listed in [40 CFR 355](#) Appendices A and B and [40 CFR 372-SUBPART D](#) are exempt from inventory requirements if any of the following are applicable:

- a. The substance is contained in any food, food additive, color additive, drug or cosmetic regulated by the FDA.
- b. The substance is present as a solid in any manufactured item to the extent exposure to the substance does not occur during normal conditions of use.
- c. The substance is used for personal, family, or household purposes and is present in the same form and concentration as a product packaged for distribution and use by the general public.

If any of the exemptions listed above are utilized, a listing of each product and the applicable exemption attached to the product's Material Safety Data Sheet must be submitted to the SGS Subcontract Administrator in place of the inventory reports outlined in the paragraph "Monthly Inventory".

### 1.8.4 Storage and Protection

The Subcontractor is responsible for the storage and protection of all his materials, equipment, and wastes, whether incorporated into the job or

not. Include hazardous material control procedures in the Environmental Protection Plan. The procedures must address and ensure the proper handling of hazardous materials, per 49 CFR 171 - 178 including appropriate transportation requirements. The Subcontractor must implement the following:

- a. Store hazardous materials and petroleum product containers on an impervious surface on pallets and with proper containment to protect them from the weather and from accidental spillage per 40 CFR 68.
- b. Incompatible materials must be segregated and have separate containment systems.
- c. No materials or wastes must be discharged without prior approval from the SGS Subcontract Administrator.
- d. Store materials in their original containers.
- e. Seal or cover stored containers.
- f. Pump leaking containers into another container or over-pack and remove from the storage area.
- g. Store wiping rags, drop cloths, paintbrushes, and rollers in covered metal containers at the end of each working day.
- h. Ensure that all containers of hazardous materials have NFPA labels or their equivalent. Keep copies of the MSDS for hazardous materials on site at all times.
- i. Certify that all hazardous materials removed from the site are hazardous materials per 49 CFR 171 - 178 and do not meet the definition of hazardous waste per 40 CFR 261. Do not store hazardous materials in the same location as hazardous waste.
- j. Dispense chemicals ensuring no spillage to the ground or water per 40 CFR 68. Perform periodic inspections of dispensing areas to identify leakage and initiate corrective action.
- k. Utilize flammable storage lockers or structures for safeguarding flammable materials. These must be located at least 50 feet from other permanent structures. Flammables or any other volatile material must not be stored or left overnight in any building, facility, or structure other than the locker. They must be removed at the end of each day and stored in an area designated by the SGS Subcontract Administrator or removed from the installation.
- l. Ensure that hazardous materials are utilized in a manner that minimizes the amount of hazardous waste that is generated.

#### 1.8.5 Fuel and Lubricants

Conduct storage, fueling, and lubrication of equipment and motor vehicles in a manner that affords the maximum protection against spill and evaporation. Manage and store fuel, lubricants, and oil in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded and regulated waste to be identified to the Contracting Officer for disposal by the Government. Storage of fuel on the project site must be in accordance with all Federal,

State, and local laws and regulations.

#### 1.8.5.1 Small Portable Fuel Cans/Containers

Small Portable Fuel Cans/Containers must be approved (listed) by Underwriters Laboratories, Factory Mutual, OSHA, or NFPA and be labeled 'Flammable - Keep Fire Away'. Keep these containers in approved Flammable storage lockers or structures. These must be located at least 50 feet from other permanent structures. Flammables or any other volatile material must not be stored or left overnight in any building, facility, or structure other than the locker. They must be removed at the end of each day and stored in an area designated by the SGS Subcontract Administrator or removed from the installation.

#### 1.8.5.2 Storage Tanks

Storage Tanks brought on-site by the Subcontractor must be UL Listed, API or STI approved for the product stored. Storage tanks must be stenciled with the tank capacity, appropriate product labeling, "no smoking" and an identifying tank number that is visible within 50 feet. Storage tanks must be properly grounded and properly secured to prevent inadvertent movement.

These tanks are to be located/sited in an appropriate location as to minimize impact to the environment (not near swales, storm water system, surface waters, wetlands, or storm drains or inlets) and must have a temporary method of secondary containment to catch drips and leaks from the tank or be double walled. The tanks must have an overspill device installed or used during fueling operations and have UL Listed fill/dispenser nozzles when applicable.

Storage Tanks must have a fuel gauge to accurately measure the level of product in the tank at all times.

Tanks must be inspected prior to use and weekly during operation and after each rainfall event to empty contaminants as necessary. Do not allow rainwater to accumulate in the containment area. Clean water (no known spills or drips noted or sheen visible) may be discharged to grade. Pump contaminated water into approved containers provided by the Government. Maintain documentation of inspections on site.

Piping must be UL Listed or ASME approved and must be constructed of material compatible with the product stored. Piping must have a temporary method of secondary containment to catch drips and leaks from or must be double walled.

#### 1.8.5.3 Fueling Operations

Fuel transfers to tanks and equipment must be isolated from all sources of ignition, must be performed in a manner to prevent static buildup, and must be performed over impervious surfaces when possible. Filling is not to exceed 80% of tank capacity to allow for expansion and a two-person fueling procedure is recommended when the gauge is not visible from the fill port. Dispenser nozzles must be secured in an upright position when not in use. Fuel Dispensing Vehicles (Tanker Trucks, Refuelers) must meet DOT design requirements

#### 1.8.5.4 Stormwater Management for Secondary Tank Containments

Only the designated Environmental Manager trained in the identification of

any released product, its hazards, and its proper removal must access the valve. Rainwater accumulated in secondary containments must be removed as soon as possible to reduce the risk of additional pollution resulting from a release to the secondary containment. Rainwater may be discharged to grade only if it meets the water quality criteria established for the State's classification of the receiving body. The Subcontractor must contact the SGS Subcontract Administrator prior to disposal of water that has been contaminated.

## 1.9 DEMOLITION, SALVAGE, AND DISPOSAL

### 1.9.1 Demolition Plan

Prepare and submit a detailed Demolition Plan (where required) of the work procedures and safety precautions to be used in the identification, demolition, handling, removal, transportation, and reclamation or disposal of removed materials. Meet with the SGS Subcontract Administrator, prior to beginning work, to discuss in detail the demolition plan.

### 1.9.2 Salvage of Materials

All items of materials designated by the SGS Subcontract Administrator to be salvaged remain the property of the Government and must be segregated, itemized, delivered, and off-loaded by the Subcontractor at the area designated by the SGS Subcontract Administrator. Remove salvageable materials and equipment in a manner that causes the least possible damage thereto. Maintain adequate property control records for all materials or equipment specified by the SGS Subcontract Administrator to be salvaged. These records must be in accordance with the Subcontractor's system of property control if approved by the SGS Subcontract Administrator. The Subcontractor is responsible for adequate storage and protection of salvaged materials and equipment until the SGS Subcontract Administrator otherwise disposition it. Repair or replace as necessary items damaged during salvage operations to restore them to usable condition.

### 1.9.3 Recycling

Use all reasonable means to divert construction and demolition waste from landfills and to facilitate their recycling or reuse. Take a pro-active, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort. In the management of waste materials, give consideration to the availability of viable markets, the condition of the material, the ability to provide the material in suitable condition and in a quantity acceptable to available markets, and time constraints imposed by internal project completion mandates. The Subcontractor is responsible for implementation of any special programs involving rebates or similar incentives related to recycling of waste. Firms and facilities used for recycling, reuse, and disposal must be appropriately permitted for the intended use to the extent required by federal, state, and local regulations.

#### 1.9.3.1 Collection

Provide clearly and appropriately identify the necessary containers, bins and storage areas to facilitate effective recycling. Handle recyclable materials to prevent contamination of materials from incompatible products and materials.

#### 1.9.3.2 Records

Maintain records to document the quantity of waste diverted through sale, reuse, or recycling. Make the records available to the SGS Subcontract Administrator during construction, and deliver a copy of the records to the SGS Subcontract Administrator upon completion of construction.

#### 1.9.4 Unforeseen Hazardous or Regulated Material

If material that is not indicated in the Subcontract documents is encountered that is dangerous to human health or the environment upon disturbance during construction operations, stop that portion of work and notify the SGS Subcontract Administrator immediately. The Waste Management Authority will determine the proper disposal options of the material in question in accordance with the section 1.10.

#### 1.9.5 Waste Minimization

Actively pursue minimizing the use of hazardous materials and the generation of hazardous waste to the maximum extent practicable. Segregation measures must be employed so that no hazardous or toxic waste becomes co-mingled with unregulated solid waste. Practice efficient waste management when sizing, cutting, and installing products and materials.

#### 1.9.6 Solid Wastes

A normal state of cleanliness at the work site is expected. Keep the work site clear of trash and debris and keep all materials and equipment in an orderly manner. Place solid wastes (excluding clearing debris) in containers that are emptied on a regular schedule.

##### 1.9.6.1 Dumpsters

Dumpsters must be equipped with a secure cover and be kept closed at all times, except when being loaded with trash and debris. Dumpsters must be located behind construction fences or out of the public view. Empty site dumpsters at least once a week or as needed to keep the site free of debris and trash. If receiving food waste, the dumpsters must be emptied a minimum of once per week. If necessary, provide 55-gallon trash containers to collect debris in the construction site area. Locate the trash containers behind construction fences or out of the public view. Empty trash containers at least once a day. For large demolitions, large dumpsters without lids are acceptable, but must not have debris higher than the sides before emptying. Do not place salvageable recycle materials in solid waste dumpsters.

\*\*\*\*\*  
NOTE: Editor is to choose either 1.9.6.2 or 1.9.6.3 depending on the real property owner not the location of the project. i.e. NASA owned facilities on CCAFS would require that the Subcontractor use the KSC landfill unless special dispositions were developed and granted during the design / contracting process.  
\*\*\*\*\*

##### [1.9.6.2 KSC Landfill

The Government will allow the Subcontractor to dispose of certain



nonhazardous solid wastes at the KSC Class III Landfill at no cost to the Subcontractor. These wastes include fiberglass, glass (not broken light bulbs), plastic, asphalt, solidified concrete, and nonhazardous blast media. Concrete disposed of at the KSC Landfill must be no larger than 36 inches in any direction with no more than 18 inches of protruding rebar.

The Subcontractor must obtain authorization to dispose of wastes at the KSC Landfill by completing the Landfill Use Approval forms and submitting them to the SGS Subcontract Administrator for signature by an authorized representative of the NASA Environmental Program Branch. The signed and approved form will be returned to the Subcontractor. The authorization form must accompany the first vehicle working on the project number and contract number at the landfill entrance. As soon as the number of loads is exceeded, the NASA Environmental Representative must re-authorize the form.

The hours of operation for the landfill are 0730-1100 and 1200-1500 Monday through Friday. The landfill is closed on weekends and holidays. Landfill available days and hours are subjected to change due to launch activities, weather advisories, security issues, and other unscheduled activities. Vehicles must check in with attendant and be inspected prior to disposal of any material(s).

Note that the landfill will not except the items listed below. Coordinate disposal of these items with the SGS Subcontract Administrator. Details on organizational contacts and disposal procedures will be provided by the Government at the preconstruction meeting.

- a. Any hazardous, controlled, or universal wastes
- b. Garbage item of any kind
- c. Currently, KSC does not have and active recycling program for anything but toner cartridges and white paper. Ransom Road does not accept many forms of steel, including non-reusable chain link fence
- d. Tires
- e. Pressure treated/painted wood or lumber
- f. Plastic sheeting
- g. Tarps
- h. Any metal that can be salvaged
- i. Steel cable
- j. Good pallets
- k. Brush (land clearing) or yard trash
- l. Sludge
- m. Batteries other than alkaline, double-wrap or isolate the terminals with tape, and recycled
- n. Oil filters
- o. Liquid waste of any kind

#### ] [1.9.6.3 CCAFS Landfill

The CCAFS Landfill is a State permitted Construction and Demolition (C&D) debris Landfill. Only refuse directly associated with construction or demolition activities will be accepted.

The hours of operation for the landfill are 0730-1130 and 1215-1500 Monday through Friday for C&D debris. Asbestos waste is accepted from 0730-1130 and 1215-1400 only on Tuesdays and Thursdays with 24 hour notice to the landfill operator through the Contracting Officer. The landfill is closed on weekends and holidays. Landfill available days and hours are subject to change. Contact the landfill operator through the Contracting Officer to

arrange for delivery. Vehicles must check in with attendant and be inspected prior to disposal of any material(s).

Separate concrete from other C&D debris since concrete is disposed of at the landfill in separate cells. Concrete must be no larger than can be handled by heavy equipment at the landfill with no more than 18 inches of protruding rebar.

Road demolition debris such as asphalt millings and chunks and lime rock are accepted by the landfill subject to the quantity limitations of the FDEP permits. Contact CHS Environmental through the Contracting Officer for guidance.

Note that the Landfill will not accept the items listed below. Coordinate disposal of these items with the referenced organization. Details on organizational contacts and disposal procedures will be provided by the Government at the preconstruction meeting.

- a. Polychlorinated biphenyls (PCBs); contact 45 CES/CEV through the Contracting Officer to arrange for drop off at Facility 44200.
- b. Garbage items of any kind; Use dumpsters or Brevard County Landfill.
- c. Paper, this includes, but is not limited to, office paper, newspapers, and magazines; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- d. Cardboard of any type; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- e. Cans or Bottles; contact Recycling Office at PAFB through the Contracting Officer to arrange for delivery.
- f. Tires; CHS Environmental through the Contracting Officer for disposal guidance.
- g. Pressure Treated/Painted Wood or Lumber; use Brevard Co. Landfill.
- h. Recyclable wood, broken pallets, no bolts, not painted or treated, use appropriate CCAFS "wood recycling only" marked dumpsters.
- i. Plastic Sheeting; use Brevard Co. Landfill.
- j. Tarps; use Brevard Co. Landfill.
- k. Fluorescent Light Bulbs; contact 45 CES/CEV through the Contracting Officer to arrange drop off at Building 1708.
- l. Any metal that can be salvaged; contact DRMO Yard through the Contracting Officer to arrange for drop off.
- m. Wet Paint Cans; contact CHS Environmental through the Contracting Officer for disposal guidance.
- n. Steel cable; contact DRMO through the Contracting Officer for salvage instructions.
- o. Good Pallets; use DRMO or SGS Supply, Facility 1621.

- p. Brush (land clearing) or Yard Trash; use Brevard Co. Landfill.
- q. Sludge; contact CHS Environmental through the Contracting Officer for sampling and disposal.
- r. Batteries; double-wrap or isolate the terminals with tape. Contact DRMO through the Contracting Officer for delivery of magnesium, silver, carbon zinc, and lead acid batteries. Contact 45 CES/CEV through the Contracting Officer to arrange for delivery of nickel cadmium, lithium, and mercury batteries at Facility 1708.
- s. Oil Filters; contact Recycling Office at PAFB to arrange for drop off.
- t. Liquid Waste of any kind; contact CHS Environmental through the Contracting Officer for disposal guidance.
- u. Aerosol Cans; contact 45 CES/CEV through the Contracting Officer to arrange for instruction and drop off at Facility 1708.

#### ]1.9.7 Waste Disposal

Remove non-salvageable material and debris from work areas and dispose of daily. Use the landfill for disposal of debris in accordance with Florida Department of Environmental Protection (FDEP) permits.

Dispose of asbestos waste at the asbestos mono-fill unless otherwise directed by the SGS Subcontract Administrator.

#### 1.10 HAZARDOUS WASTES

Manage hazardous and controlled waste in accordance with all applicable statutes, rules, orders and regulations which include but are not limited to 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 267, 40 CFR 268, 40 CFR 273, 40 CFR 279, 40 CFR 761 and as outlined below. In no case must the Subcontractor or his representatives transport hazardous waste.

The Subcontractor is responsible for identifying processes and operations, and the location and nature of all potentially hazardous and controlled waste including any chemicals, paints, solvents, petroleum, oil and lubricant (POL) products, and their containers, as defined in 40 CFR 261, 40 CFR 273, 40 CFR 279, or 40 CFR 761.

Provide copies of Material Safety Data Sheets for each material which may be generated as a waste and provide to the SGS Subcontract Administrator no later than fourteen (14) days prior to the start of waste generation process. Do not deliver substances to the Spaceport without the appropriate Material Safety Data Sheets.

Establish an on-site satellite waste accumulation area within sight of any point where hazardous or controlled wastes may be generated. If a satellite accumulation area is required to be out of site of the generator, a written request must be provided to the SGS Subcontract Administrator no later than fourteen (14) days prior to the start of the waste generating process. The Subcontractor must receive written approval prior to placing the satellite site in service. Potential or identified hazardous and/or controlled wastes must be stored in the appropriate containers and properly

labeled inside the accumulation area in accordance with the SGS Subcontract Administrator's requirements. The following standards are for wastes collected at satellite accumulation areas:

- a. Hazardous wastes at satellite accumulation areas must be collected in compatible containers.
- b. No more than 55 gallons of hazardous waste or 1 quart of acutely hazardous waste must be accumulated at one time.
- c. If more than 55 gallons of waste or 1 quart of acutely hazardous waste is generated, the container holding the excess waste must be marked with the date the excess waste began accumulating. Within three days, the excess waste will be transferred to a 90-day accumulation point or a permanent treatment, storage and disposal facility.
- d. Containers must be labeled with either the words "Hazardous Waste" or with other words that identify the contents of the drum.
- e. A container holding hazardous waste must always be kept closed during accumulation except when it is necessary to add or remove waste.

DOT compliant storage containers will be provided to the Subcontractor, by the SGS Subcontract Administrator, as required during the subcontract performance period. The SGS Subcontract Administrator will arrange for the containers at the request of the construction Subcontractor. Request storage containers in writing from the SGS Subcontract Administrator a minimum of 3 days prior to the required need date. Drums will be delivered to the project site unless otherwise noted.

At the request of the Subcontractor, the SGS Subcontract Administrator will provide any analytical support required. The SGS Subcontract Administrator will arrange for all sampling and testing of potentially hazardous or controlled waste.

Within 48 hours of having waste ready for disposal, notify the SGS Subcontract Administrator to arrange for pick-up and removal.

The Subcontractor is responsible for ensuring all personnel involved in the management of hazardous or controlled wastes have been properly trained in accordance with 40 CFR 265.16. Provide a list of all properly trained individuals involved in the performance of this subcontract to the SGS Subcontract Administrator prior to the start of any waste generating processes. The SGS Subcontract Administrator may at any time during the course of the subcontract performance period require the Subcontractor to provide individual training records for any employee involved in the performance of this subcontract, and the contents of the course or courses completed to satisfy the training requirements. Attendance at KSC Training Course QG-211 "Hazardous Waste Management" satisfies these training requirements.

The following is a partial list of hazardous and controlled waste that may occur on a construction project. This list is NOT to be considered all-inclusive but merely an example. Hazardous wastes are defined and listed in the detail in the Resource Conservation and Recovery Act of 1976 and are to be determined in accordance with 40 CFR 261.

#### **EXAMPLES OF CONTROLLED AND HAZARDOUS WASTE:**

1. Discarded products or process wastes exhibiting the following characteristics:
  - a. Ignitability; flash point less than or equal to 140 degrees F (e.g. paints, alcohols, petroleum naphtha)
  - b. Corrosivity; pH less than or equal to 2 or greater than or equal to 12.5 (e.g. etching acids, battery electrolytes, caustic cleaners)
  - c. Reactivity; (e.g. cyanide bearing products, water reactive materials or explosives)
  - d. Toxicity; containing heavy metals, chlorinated solvents, or pesticides above regulatory limits (e.g. chromium > 5 ppm, lead > 5 ppm, trichloroethylene > 0.5 ppm)
2. Spent toxic solvents contaminated materials (e.g. solvent 113, MEK, 1,1,1-trichloroethylene)
3. Unused commercial chemical products, or spill residues thereof, listed by the USEPA (e.g. benzene, carbon tetrachloride, trichlorofluoromethane)
4. Empty aerosol cans
5. Used oil, petroleum products containing dirt or water
6. Filters, rags and absorbents containing petroleum product residues
7. Asbestos containing materials
8. Detergent solutions or process rinse water
9. Lighting ballasts
10. Abrasive blast materials containing paint particulates
11. Wastewater containing ethylene glycol, alcohol, Freon 113, chlorine, etc.
12. Waste solvents and mixtures, wipes, rags, and applicators used with solvents (alcohol, Freon, MEK, acetone, trichloroethane, etc.)
13. Welding or soldering fluxes
14. Electrolytes, acids, corrosives, etchants and associated equipment and debris
15. Paint strippers
16. Paint and primer liquids and clean up thinners
17. Unused/defective catalysts
18. Uncured or improperly mixed sealants and adhesives
19. Fluorescent light bulbs

#### 1.10.1 Lead

[Lead-based paint has not been identified in the subcontract work area. If the Subcontractor suspects the presence of lead-based paint not shown on the drawings or must disturb lead-based paint which is not part of the contract, the Subcontractor must immediately inform the SGS Subcontract Administrator. The SGS Subcontract Administrator will determine whether removal of the questionable material is required and who will accomplish the removal.]

[Lead-based paint has been identified in the contract work area. Removal can create potential health hazards for workers. Observe all applicable provisions of standards and requirements listed in this specification and Occupational Safety and Health Administration requirements [29 CFR 1926.55](#), [29 CFR 1926.62](#). Submit a "Site Specific" Health and Safety [Plan for Controlling Exposures to heavy metals](#) to the SGS Subcontract Administrator.

In addition, for the health protection requirements for hazardous metals the presence of these substances should be communicated to the Subcontractor to allow them to take steps to protect workers and to comply with OSHA substance specific standards [29 CFR 1926.1101](#) and [29 CFR 1926.1126](#) for lead, cadmium and chromium, and to prevent personnel exposure. These materials can be assumed to be present (and steps taken to protect workers) or testing using approved methods and qualified personnel performed to show that these materials are not present as interpreted by qualified personnel (and not required to communicate hazard or comply with applicable standards). The date of construction cannot be used to exempt work from these requirements.]

#### 1.10.2 ASBESTOS

Asbestos Containing Material (ACM) may be hazardous and requires special handling and disposal procedures. If the Subcontractor suspects the presence of ACM not shown on the drawings or must disturb ACM which is not part of the contract, the Subcontractor must immediately inform the SGS Subcontract Administrator. The SGS Subcontract Administrator will determine whether removal of the questionable material is required and who will accomplish the removal. Do not disturb, remove, enclose, or otherwise cause a potential asbestos fiber release. Submit a "Site Specific" Health and Safety [Plan for Controlling Exposures to Asbestos Containing Building Materials](#) to the SGS Subcontract Administrator.

Subcontractor must not use any materials containing asbestos and is liable to the Government for all costs incurred to clean up, handle, remove and dispose of any ACM resulting from the Subcontractor's actions or non-actions that do not comply with the requirements of this section.

[For removal / disturbance of non-friable exterior building caulks/mastics, the work must be performed in accordance with OSHA [29 CFR 1926.1101](#) requirements. In addition, the contractor performing work must comply with requirements of EPA's NESHAP [40 CFR 61](#), Florida Statutes [FAC CHAPTER 62-257](#), [FL-STAT 469](#), and NASA [KNPR 1840.19](#). The required contractor licensure, training, air monitoring, work plan, employee PPE and waste disposal submittals as well as government required site inspections are spelled out in detail in the Asbestos Abatement specification section.]

#### [1.10.3 Silica

Demolition of silica containing materials, such as concrete, masonry, and

ceramic tiles, may result in exposure to respirable silica above applicable OSHA and ACGIH limits. The Subcontractor must submit a site specific health and safety [Silica plan](#) describing actions that will be taken to assure protection of both workers and adjacent unprotected personnel from dust releases containing respirable silica. The plan must be reviewed and approved prior to start of demolition activities.]

#### 1.11 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

If known historical or archaeological resources exist within the Subcontractor's work area, and have been designated on the Subcontract drawings, the Subcontractor must install protection for these resources as shown on the drawings and is responsible for their preservation during the subcontract.

If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, temporarily suspend all activities that could damage or alter such resources. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock or coral alignments, paving, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Subcontractor must immediately notify the SGS Subcontract Administrator so that a determination can be made as to their significance and what, if any, special disposition of the finds can be made. Cease all activities that could result in impact to or the destruction of these resources. Secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

#### 1.12 ENDANGERED SPECIES

If known threatened, endangered, and other protected species and/or their habitat exist within the Subcontractor's work area, and have been designated on the Subcontract drawings, the Subcontractor must install protection for these resources as shown on the drawings and is responsible for their preservation during the subcontract.

Minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Subcontractor is responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations. Additionally, if any bird nests are observed in the work area, the Subcontractor must immediately notify the SGS Subcontract Administrator.

If during excavation or other construction activities any previously unidentified or unanticipated threatened, endangered, and other protected species and/or their habitat are discovered or found, temporarily suspend all activities that could damage or alter such resources. Resources covered by this paragraph include but are not limited to: Sea Turtles, Gopher Tortoise, Indigo Snake, Least Tern, Florida Scrub Jay and Southeastern Beach Mouse. Upon such discovery or find, the Subcontractor must immediately notify the SGS Subcontract Administrator. Cease all activities that could result in impact to or the destruction of these resources. Any land disturbance activities outside the approved limits of construction is prohibited.

[Clearing will most likely be restricted to outside Florida Scrub-Jay

nesting season which lasts from March 1st to June 30th, since Jays are known to occupy and nest in areas similar to this project site.]

[1.13 Gopher Tortoises (Gopherus Polyphemus)

The project area is known to support gopher tortoises, a state listed species of special concern. All tortoises/burrows located in the project area that have the potential to be impacted by project activities must be relocated by the Environmental Office.

Submit [request for a Gopher Tortoise survey](#) 4 weeks prior to any trenching/digging. Contact Subcontract Administrator if relocation is required.

] [1.14 Southeastern Beach Mouse (Peromyscus Polionotus Niveiventris)

Recent trapping has shown that the Southeastern Beach Mouse, a Federally listed threatened species and a species typically found in coastal dune/strand habitat, is utilizing inland areas not historically considered typical beach mouse habitat. It is possible that beach mice are utilizing the habitat in which this project is proposed to occur. The Subcontractor must notify the Environmental Office prior to start of project so that potential impacts discovered during the design and review process can be finalized. Contact Subcontract Administrator if beach mice are found within project boundaries.

] 1.15 CONNECTION TO EXISTING WATER OR SEWER LINES

Obtain written approval from the SGS Subcontract Administrator a minimum of fourteen (14) calendar days prior to scheduling connection to existing water or sewer lines to ensure all applicable environmental permits are obtained prior to connection. Ensure proper disinfection sampling occurs if water line is opened. Use backflow prevention devices on all temporary connections. Use must be approved by Contract Administrator.

1.16 WASTEWATER

Disposal of wastewater must be as specified below.

- a. Wastewater from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, directional drilling, etc. must not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants.
- b. Dispose of the construction related wastewater by collecting and placing it in a retention area where suspended material can be settled out and/or the water can evaporate to separate pollutants from the water. The site for the retention area must be coordinated and approved with the SGS Subcontract Administrator. Remove and dispose of the residue left in the pond prior to completion of the project in accordance with Federal, State, and local laws and regulations. Backfill the area to the original grade, top-soil and seed/sod.
- c. Water generated from the flushing of lines after disinfecting or hydrostatic testing must be land applied in accordance with all Federal, State, and local laws and regulations.



#### 1.17 LAND RESOURCES

Confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. Ropes, cables, or guys must not be fastened to or attached to any trees for anchorage unless specifically authorized. Provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Remove stone, soil, or other materials displaced into unlearned areas. Restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

##### 1.17.1 Work Area Limits

Prior to commencing construction activities, mark the areas that need not be disturbed under this Subcontract. Mark or fence areas within the general work area, which are not to be disturbed. Protect monuments, monitoring wells and markers before construction operations commence. Where construction operations are to be conducted during darkness, any markers must be visible in the dark. The Subcontractor's personnel must be knowledgeable of the purpose for marking and/or protecting particular objects.

##### 1.17.2 Erosion and Sediment Controls

The Subcontractor is responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Subcontractor must be such that water quality standards are not violated as a result of the Subcontractor's construction activities. Keep the area of bare soil exposed at any one time by construction operations to a minimum. Construct or install temporary and permanent erosion and sediment control best management practices (BMPs) as indicated on the drawings, as specified in Section 01356A STORM WATER POLLUTION PREVENTION MEASURES, and as necessary to maintain compliance with all applicable Environmental Regulations. BMPs include, but are not limited to, vegetative cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. Remove any temporary measures after the area has been stabilized.

##### 1.17.3 Contaminated Soil or Groundwater

If known contaminated soil or groundwater exists within the work area, and has been designated on the Subcontract drawings, implement the site controls, including handling and disposing of contaminated soil or groundwater, as indicated on the Subcontract drawings and develop a site specific [health and safety plan](#) and implement safety and health measures to minimize worker exposure to site contaminants. All site workers must be properly trained in accordance with OSHA and EPA standards. Specific requirements are outlined in the SGS Safety Addendum.

##### 1.17.4 Construction Dewatering

Construction operations for dewatering must be controlled at all times to maintain compliance with existing State water quality standards and

designated uses of the surface water body. Land application is the preferred method to dispose of dewatering effluent. Conduct dewatering operations in accordance with the State of Florida Department of Environmental Protection "Generic Permit for the Discharge of Produced Ground Water From Any Non-Contaminated Site Activity" and the most current St. Johns River Water Management District "Notice General Construction Dewatering Permit, Chapter 40C-22, F.A.C."; as well as local rules and policies.

#### 1.17.5 Dewatering Plan

Prior to construction, submit a dewatering plan to the SGS Subcontract Administrator for approval. The plan must include expected pumping schedule, rate, volume, discharge location, and turbidity controls. The plan must specify if dewatering activities are expected to exceed 300,000 gallons per day (GPD) or 30 days duration.

#### 1.17.6 Dewatering Discharges

Do not direct dewatering discharges to wetlands or Outstanding Florida Water (OFW), Class I or II. Implement control measures to prevent turbid discharge to existing water bodies. Dewatering activities must not last longer than 180 days. Dewatering pumping rates must be less than 4 million gallons per day (MGD) with the following exceptions:

During the first 5 days, dewatering pumping must not exceed 6 MGD.

During the first 60 days, dewatering pumping must be less 2 MGD average.

Up to day 180, dewatering pumping must be less than 1 MGD average.

Records for dewatering activities must be kept on-site.

#### 1.17.7 Groundwater Sampling

Take weekly turbidity readings at all points of direct discharge into existing rivers, lakes, or natural lakes. Conduct groundwater and dewatering effluent sampling in accordance with the State of Florida Department of Environmental Protection "Generic Permit for the Discharge of Produced Ground Water From Any Non-Contaminated Site Activity". Sample the effluent before the commencement of discharge, again within thirty (30) days after commencement of discharge, and then once every six (6) months for the life of the project. Sample the effluent for the following parameters: Total Organic Carbon (TOC), pH, Mercury, Cadmium, Copper, Lead, Zinc, Chromium (hex), Benzene and Naphthalene. If any of the analytical test results exceed the screening values (as indicated in the above mentioned permits), dewatering to existing surface water bodies will not be allowed. Prior to dewatering, coordinate all sampling through the SGS Subcontract Administrator. Sampling will be performed by the JBOSC Environmental Planning.

#### 1.17.8 Subcontractor Facilities and Work Areas

The Subcontractor's field offices, staging areas, stockpile storage, and temporary buildings must be placed in areas designated on the drawings or as directed by the SGS Subcontract Administrator. Temporary movement or relocation of Subcontractor facilities must be made only when approved. Provide erosion and sediment controls for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and

embankments for plant and/or work areas must be controlled to protect adjacent areas.

#### 1.17.9 Wetlands

Wetlands existing within and around the Subcontractor's work area have been designated on the Subcontract drawings. Do not enter, disturb, or destroy any wetlands unless expressly allowed to do so by a permit in accordance with paragraph "Environmental Permits and Commitments." Authorization to enter specific wetlands identified does not relieve the Subcontractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries. The Subcontractor must install protection for these resources as shown on the drawings and is responsible for their preservation during the Subcontract. After the installation of protection measures, the Subcontractor must notify the SGS Subcontract Administrator so that a site inspection can be scheduled to verify proper placement and installation of these measures.

#### 1.17.10 Stormwater Pollution Prevention Plan

Implement the pollution prevention measures specified in this section and in Section 01 57 23.00 10 STORM WATER POLLUTION PREVENTION MEASURES and in the drawings, in a manner that meets the requirements of the National Pollutant Discharge Elimination System (NPDES) permit (attached to this section). NPDES is not applicable in all cases.

Provide pollution prevention measures, including erosion and sediment controls, in accordance with Federal, State, and local laws and regulations. The pollution prevention measures selected and maintained by the Subcontractor must be such that water quality standards are not violated as a result of the Subcontractor's construction activities. Construct or install temporary and permanent erosion and sediment control best management practices (BMPs) as indicated on the drawings and as necessary to minimize environmental damage and maintain compliance with regulatory requirements.

#### 1.18 AIR RESOURCES

Equipment operation, activities, or processes performed by the Subcontractor must be in accordance with all Federal and State air emission and performance laws and standards.

##### 1.18.1 Dust Control

Control dust particles from construction activities at all times, including weekends, holidays and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which cause violations of Environmental Regulations. If necessary, the Subcontractor must restrict speeds on unpaved roads to prevent excess emission of particulate matter. Perform particulate control as the work proceeds and whenever a particulate nuisance or hazard occurs. The use of calcium chlorides, salts, or other chemicals to control air pollution (dust) is not permitted. Water sprinkling methods are acceptable.

##### 1.18.2 Burning

[Burning is prohibited on the Government premises.] [Burning is not allowed

on the project site unless specified in the Subcontract drawings or authorized in writing by the SGS Subcontract Administrator. The specific time, location, and manner of burning is subject to Environmental Regulations.] [Fires must be confined to a closed vessel, guarded at all times, and must be under constant surveillance until contents have burned out or have been extinguished.] [Burning must completely reduce the materials to ashes.]

#### 1.19 PESTICIDE MANAGEMENT

##### 1.19.1 Pesticide Delivery and Storage

Pesticides must be delivered to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Store pesticides according to manufacturer's instructions and under lock and key when unattended.

##### 1.19.2 Qualifications

For the application of pesticides, use the services of a Lower Tier Subcontractor whose principal business is pest control. The Lower Tier Subcontractor must be licensed and certified in the state of Florida.

##### 1.19.3 Pesticide Handling Requirements

Formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and use the clothing and personal protective equipment specified on the labeling for use during all phases of the application. Material Safety Data Sheets (MSDS) must be available for all pesticide products.

##### 1.19.4 Application

Pesticides must be applied by a State Certified Pesticide Applicator in accordance with EPA label restrictions and recommendation. The Certified Applicator must wear clothing and personal protective equipment as specified on the pesticide label. Water used for formulating must only come from locations designated by the SGS Subcontract Administrator. Do not allow the equipment to overflow. Prior to application of pesticide, all equipment must be inspected for leaks, clogging, wear, or damage and must be repaired prior to being used.

##### 1.19.5 Disposal

Dispose of pesticides in accordance with label directions.

#### 1.20 SURFACE PREPARATION AND PAINTING

##### 1.20.1 Abrasive Blasting

Operations for paint/coating removal or other corrosion control activities involving the use of abrasive blasting to prepare surfaces must not be allowed to contaminate soil or surface waters. Provide tarpaulin drop cloths, windscreens, and other means necessary to enclose abrasive blasting operations to confine and collect dust, abrasive, agent, paint chips, and other debris. All material removed and/or generated, including coating materials and blast media, must be collected for proper disposal. Collect, sample, and dispose of all material removed during blasting operations in accordance with all applicable Environmental Regulations. Storage areas for

blast media and blast debris must be protected from the natural elements to prevent contamination.

#### 1.20.2 Exterior Painting

Operations involving the painting of exterior surfaces must implement measures in the paint application process to ensure a reduction in the amount of overspray that is created on a project. Drop cloths or similar containment must be used to prevent paint from coating ground surfaces. Measures must be implemented to contain any overspray generated as a result of a painting operation. Measures must be implemented to prevent rainfall and runoff from contacting items such as painting supplies, paint equipment, empty paint cans, etc., which could have paint residue on them.

#### 1.20.3 Use of Water

The process of preparing certain surfaces, mainly the exteriors of buildings and structures, prior to the application of surface coatings may incorporate the use of water. These preparation activities include, but are not limited to: operations for the removal of dirt, mold, and mildew prior to painting (general surface cleaning); use of pressurized water to remove coatings (water blasting); and the use of blast media to remove paint/coatings along with water as a dust inhibitor (wet blasting). Perform operations using water with either plain potable water or potable water with biodegradable, phosphate-free detergents and/or low concentration ( $\leq 5\%$ ) sodium hypochlorite (bleach), calcium hypochlorite or hydrogen peroxide.

All material removed and/or generated, including coating materials, water, and blast media, must be collected for proper disposal. Collect, sample and dispose of all material removed during water blasting operations in accordance with all applicable environmental Federal, State, local and Center laws and regulations. Separate liquids from the solid debris by screening the material collected with a 40-micron (or finer) filter mesh.

### PART 2 PRODUCTS

#### 2.1 POLLUTION PREVENTION/AFFIRMATIVE PROCUREMENT

The Subcontractor and all Lower Tier Subcontractors involved in this project must comply with applicable Government Affirmative Procurement (AP) requirements [40 CFR 247](#). Affirmative Procurement is the purchase of environmentally friendly products and services (e.g., products made from recycled or recovered materials). Federal agencies, their Contractors and Subcontractors are required to maximize the purchase materials on the list of "EPA Designated Guideline Items" with the minimum recycled or recovered materials content whenever practicable according to [40 CFR 247](#) and [RCRA 6002](#). The [Recycled Materials](#) list includes, but is not limited to:

##### CONSTRUCTION PRODUCTS

- Structural fiberboard and laminated paperboard
- Railroad grade crossing surfaces
- Flowable fill
- Hydraulic mulch (paper or wood based)
- Cement and concrete containing granulated blast furnace slag
- Cement and concrete containing coal fly ash
- Parking stops
- Shower/restroom dividers
- Floor tiles

Steel  
Patio blocks  
Latex paint  
Carpet  
Channels  
Building Insulation

LANDSCAPING PRODUCTS

Lawn and garden edging  
Hydraulic mulch  
Plastic lumber  
Park and recreation products  
Park benches and picnic tables

MISCELLANEOUS PRODUCTS

Mats  
Signage  
Bike Racks

Detailed information on EPA AP approved products and manufacturers providing these products is available at [www.epa.gov/cpg/products.htm](http://www.epa.gov/cpg/products.htm). Subcontractors must maximize the purchase of AP approved items; that is, items that meet the minimum recycled or recovered material content guideline.

Subcontractors must provide the SGS Subcontract Administrator with a report itemizing all AP approved items used in the project as a closeout submittal concurrently with [Certification of Completion](#) upon project completion.

Subcontractors must also provide to the SGS Subcontract Administrator a written justification for all items that are on the EPA CPG "New Items Proposed" list but are not officially AP approved.

PART 3 EXECUTION

Not Used

-- End of Section --